

CLAIMS

1. A system, for running on a computer, for determining an investment strategy for an entity
5 with assets in taxable and tax-free accounts, comprising:
 - an account information input component, to accept information regarding said assets in said taxable and tax-free accounts for said entity;
 - an investment selection input component, to accept information regarding a plurality of investments, including an indication of a percentage amount of said assets to invest in each of
10 said plurality of investments;
 - an account amount selection component, to determine an amount to invest from said taxable accounts and tax-free accounts in each of said plurality of investments, wherein said determined amounts substantially matches said indication of a percentage amount to invest in each of said plurality of investments;
 - 15 a time horizon input component, to accept an indication of a time horizon; and
 - a return on investment calculation component, to calculate a return on investment for said entity based on said information regarding said assets, said information regarding a plurality of investments, said indication of a percentage amount, said selected amount to invest from said taxable and said tax-free accounts, and said indication of a time horizon;
 - 20 wherein said account amount selection component determines an amount from said taxable and tax-free accounts in order to produce a maximal after-tax accumulation for said entity at said time horizon.
2. The system of claim 1 wherein said account amount selection component randomly selects
25 amounts from said taxable and tax-free accounts, and said return on investment calculation component calculates an after-tax accumulation for said entity based on said randomly selected amounts.
3. The system of claim 2 wherein steps of randomly selecting amounts from said taxable and
30 tax-free accounts, and calculating a return, are performed a plurality of times, and said system

* outputs selected amounts from said taxable and tax-free accounts which produce a maximal return.

4. The system of claim 1 wherein said account amount selection component selects an amount

5 from said taxable and tax-free accounts using Genetic Algorithms (GA) in order to produce a maximal return on investment for said entity at said time horizon.

5. The system of claim 4 further including:

a chromosome structure, for use with said Genetic Algorithms, wherein said

10 chromosome structure includes a plurality of values, each value being an indication of an amount from said tax-free accounts to invest in a selected one of said plurality of investments; and

said return on investment calculation component calculates an after-tax accumulation for said entity based on said values in said chromosome structure.

15 6. The system of claim 1 further including:

a personal tax component, to accept information regarding personal tax rates for said entity, wherein said a return on investment calculation component calculates a return on investment for said entity based on said information regarding said personal tax rates.

7. On a computer system, a method of determining an investment strategy for an entity with assets in taxable and tax-free accounts, said method comprising:

receiving information regarding a plurality of investments;

5 receiving information regarding a percentage amount of said assets to invest in each of said plurality of investments;

receiving information regarding a time horizon; and

for each of said plurality of investments, determining an amount to invest from said taxable and tax-free accounts in said investment, wherein said determined amount to invest

10 substantially matches said percentage amount to invest in said investment;

wherein said determinations will produce a substantially maximal after-tax accumulation for said entity at said time horizon.

8. The method of claim 8 wherein said step of determining an amount to invest from said taxable and tax-free accounts includes calculating tax consequences over said time horizon for said entity based on said amounts to invest.

9. The method of claim 8 wherein said step of determining an amount to invest from said taxable and tax deferred accounts further includes:

20 performing sampling steps a plurality of times, said sampling steps comprising:

randomly selecting amounts from said tax-free accounts to invest in each of said plurality of investments;

determining appropriate amounts from said taxable accounts so that said selected percentage amounts for each of plurality of investments is satisfied; and

25 determining a result if said amounts were invested as selected and determined for said time horizon.

10. The method of claim 8 wherein said step of determining an amount to invest from said taxable and tax deferred accounts further includes:

creating a plurality of GA chromosome structures, each GA chromosome structure including a value for each of said plurality of investments, each value being an indication of an amount from said tax-free accounts to invest in said corresponding investment;

setting said values in said plurality of GA chromosome structures to initial settings;

5 evaluating fitness of said plurality of GA chromosome structures;

selecting at least one of said GA chromosome structures with an optimal fitness; and
using said values from said selected GA chromosome structure as amounts from said

tax-free accounts to invest in said corresponding investment for said substantially maximal
accumulation.

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11. The method of claim 10 further including the step of:

calculating an improvement value of said substantially maximal after-tax
accumulation based on said determined investment amounts from said taxable and tax-free
accounts, as compared to an after-tax accumulation based on said initial settings.

The document contains 11 pages in total.

12. A computer system for determining an optimal investment strategy for an entity with assets in taxable and tax-free accounts, comprising:

means for obtaining tax information, account information, account amounts, and time

5 horizon information from said entity;

a GA chromosome structure, for indicating an amount to invest in said taxable and tax-free accounts;

means for obtaining initial amounts to invest in said taxable and tax-free accounts;

means for calculating an after-tax accumulation based on indications in said GA

10 component structure;

means for modifying said GA chromosome structure to improve said calculated after-tax accumulation; and

means for displaying said resulting after-tax accumulation.